| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 607 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/300 RS 15-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 L6 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

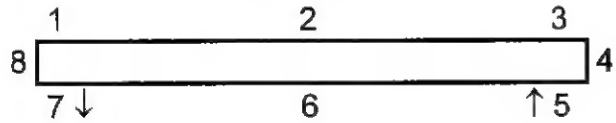
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

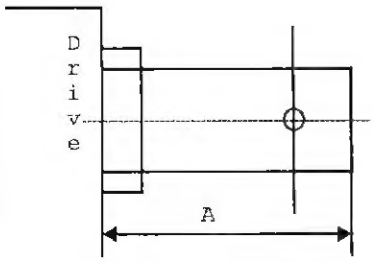
Drive




Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 012 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 12/10/150/900 LS 16-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

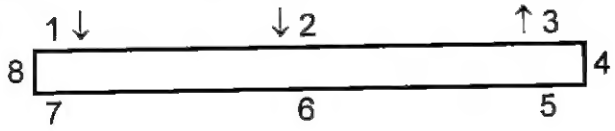
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 – 507 | 8 | 489 - 511 | 12 |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

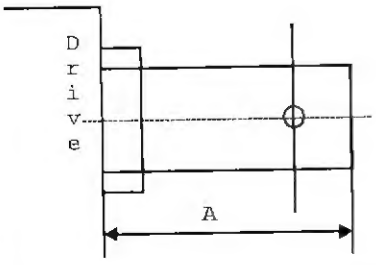
Drive




Fuel inlet 1 + 2
Fuel outlet 3

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 608 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/100 LS 17-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 603 V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm

DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = _____ °CS

Cylinder 1 on drive side

Cam sequence: 1 - 5 - 3 - 4 - 2 - 6

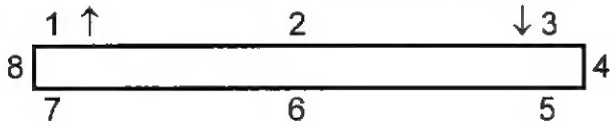
Cam spacing: 0 15 120 135 240 255 °CS

FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive

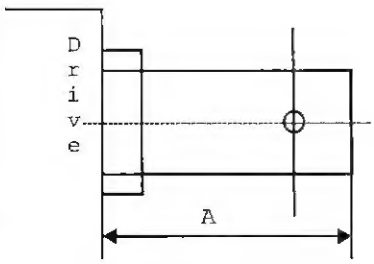



Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps :

Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 609 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/100 LS 18-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 603 V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

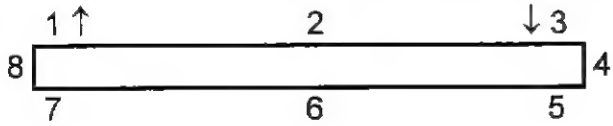
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 6 - 2 - 4 - 3 - 5
Cam spacing: 0 15 120 135 240 255 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Delivery quantities

| | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

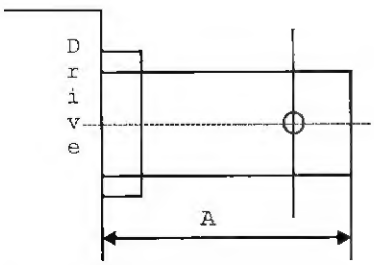
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 815 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 8/10/160/900 LS 39 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 BV8 |
| Fuel-supply p: | 0 440 002 031 | Power : | 960 kw( Bhp ) |
| Injector: | | Applic.: | Lokom./Katamaran |

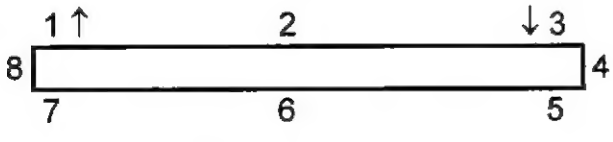
| | | | |
|---|---|---|---|
| Perm.pres.: 1.5 bar | NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS | Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT $_{max}$ °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

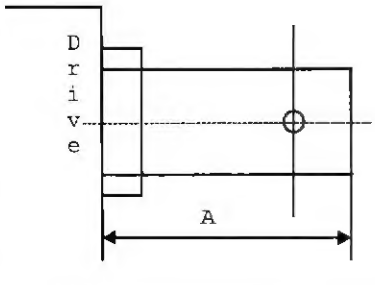
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 613 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/160/300 RS 38 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 B6L |
| Fuel-supply p: | Power : 720 kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

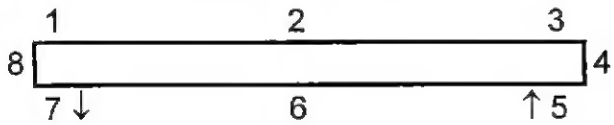
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

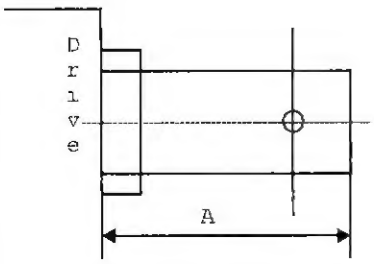
Drive




Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 017 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 12/10/160/100 LS 43 | Customer. Deutz-MWM |
| Governor: | Engine: TBD 604 BV12 |
| Fuel-supply p: | Power : 144 kw( 0 Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

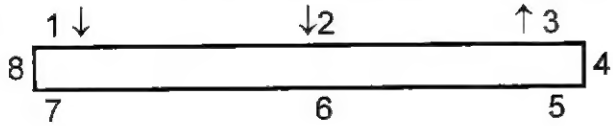
| | | |
|---|---|---|
| Perm pres.. 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

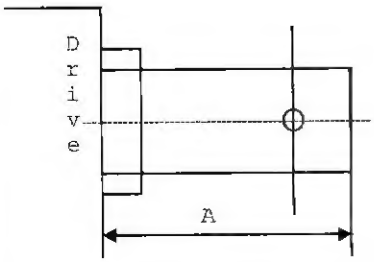
Drive




Fuel inlet 1 + 2
Fuel outlet 3

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 016 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 12/10/160/900 LS 42 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 BV16 |
| Fuel-supply p: | 0 440 002 031 + 0 440 002 033 | Power : | 144 kw( Bhp<br>0 ) |
| Injector: | | Applic.: | Lokom./Katamaran |

Perm pres.: 1.5 bar _____ NHA: 0 681 443 022
Perm.pos: PS Open.p.: 172 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 2 x 1500
Overflow valve:
1 417 413 000

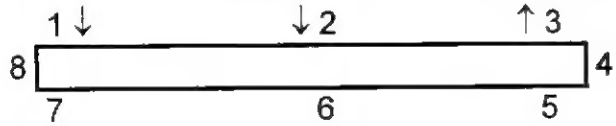
Test oil:
ISO 4113
40 +5° C

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

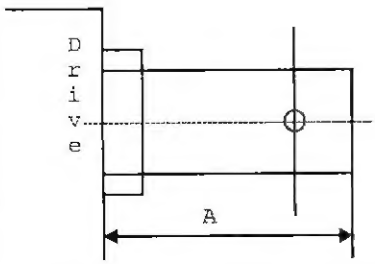
Drive




Fuel inlet 1 + 2
Fuel outlet 3

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | **IN-LINE INJECTION PUMPS**<br>Testing and setting values | Assembly no.:<br>9 400 361 817 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/160/100 LS 41 | Customer: DeutZ-MWM |
| Governor: | Engine: TBD 604 BV16 |
| Fuel-supply p: | Power : 192 kw( 0 Bh p) |
| Injector: | Applic.: Lokom./Katamaran |

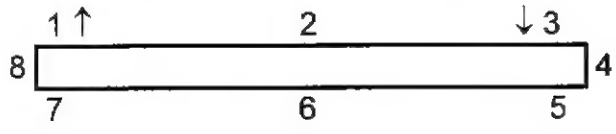
| | | |
|---|---|---|
| Perm.pres 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 8 - 6 - 5 - 7 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 59 1- 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

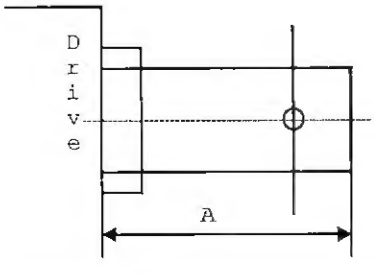
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 816 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 8/10/160/100 LS 40 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 BV16 |
| Fuel-supply p: | | Power : | 192 kw( Bh<br>0 p) |
| Injector: | | Applic.: | Lokom./Katamaran |

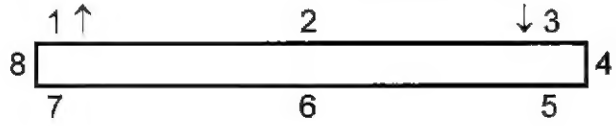
| | | | | | |
|---|---|---|---|---|---|
| Perm.pres.: 1.5 bar | | NHA: 0 681 443 022 | Press.l: 1 680 750 027 | | Test oil: |
| Perm.pos: PS | | Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | | Overflow valve:<br>1 417 413 000 | | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 7 - 8 - 6 - 3 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

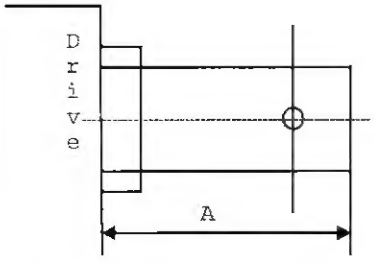
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 015 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 12/10/160/100 LS 37 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 BV12 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: Lokom./Katamaran |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

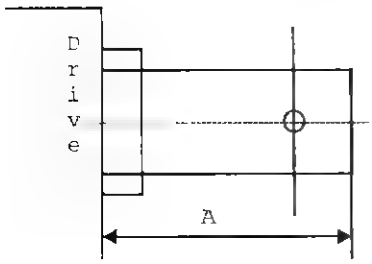
| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 ↓ ↓ 2 ↑ 3
8 [ ] 4
7 6 5

Fuel inlet 1 + 2
Fuel outlet 3

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 814 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/160/100 LS 36 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 BV16 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: Lokom./Katamaran |

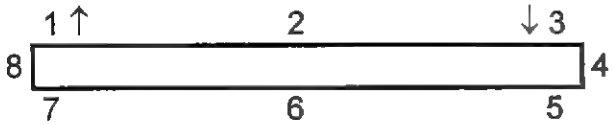
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 8 - 6 - 5 - 7 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

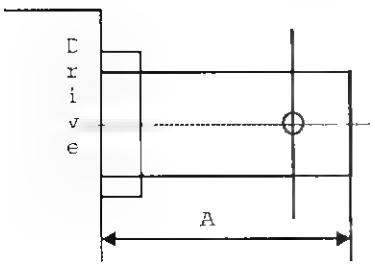
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 813 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 8/10/160/100 LS 35 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 BV16 |
| Fuel-supply p: | | Power : | kw( Bh p) |
| Injector: | | Applic.: | Lokom./Katamaran |

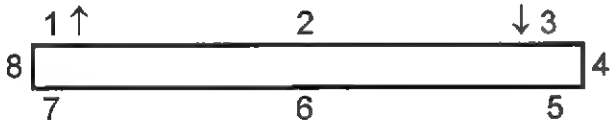
| | | | | |
|---|---|---|---|---|
| Perm.pres.: 1.5 bar | NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS | Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 7 - 8 - 6 - 3 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

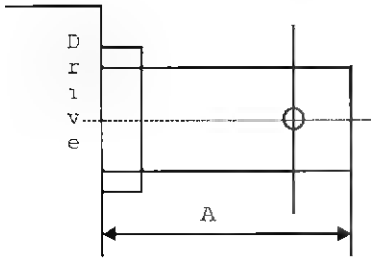
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 612 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/160/300 RS 34 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 B6L |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: Lokom./Katamaran |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

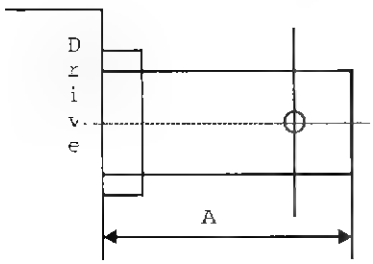
| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 2 3
8 [ ] 4
7 ↓ 6 ↑ 5

Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 812 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/160/900/4 LS 33 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 BV8 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: Lokom./Katamaran |

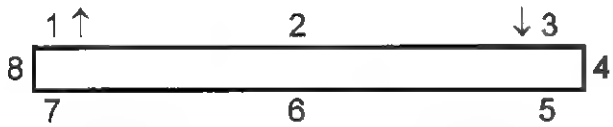
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump: | Overflow valve: | |
| P.S. 1 left, P.S. 2 right | 1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Delivery quantities — Setting values (mm³/H — Checking values (mm³/H

| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

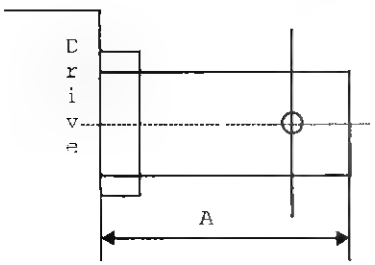
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 38.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 014 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 12/10/160/900 LS 32 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 BV 12 |
| Fuel-supply p: | | Power : | kw( Bh p) |
| Injector: | | Applic.: | Lokom./Katamaran |

| | | | | | |
|---|---|---|---|---|---|
| Perm.pres.: 1.5 bar | NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS | Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 591 – 609 | 10 | 586 – 614 | 15 | |
| 2. | Basic setting | 900 | 13 | 615 – 645 | 16 | 607 – 653 | 24 | |
| 3. | Basic setting | 900 | 15 | 710 – 740 | 16 | 702 – 748 | 24 | |
| 4. | Basic setting | 300 | 4.5 | 35 - 55 | 10 | 28 - 62 | 18 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

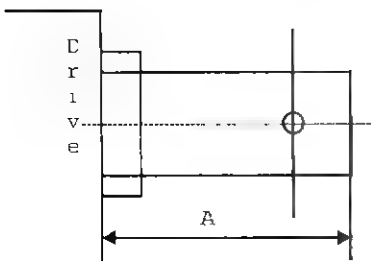
Drive 1 ↓ ↓ 2 ↑ 3
8 4
7 6 5

Fuel inlet 1 + 2
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps :

Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 611 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/160/300 RS 31 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 B L6 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

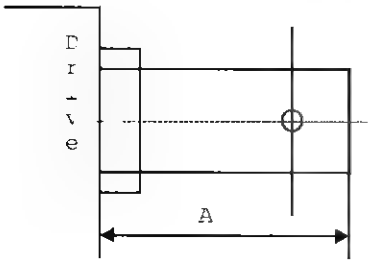
| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 16.5 | 731 – 749 | 10 | 726 – 754 | 15 | |
| 2. | Basic setting | 900 | 16.5 | 705 – 735 | 16 | 697 – 743 | 24 | |
| 3. | Basic setting | 900 | 13.0 | 760 – 780 | 16 | 552 – 598 | 24 | |
| 4. | Basic setting | 300 | 5.0 | 50 - 80 | 15 | 43 - 87 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 2 3
8 4
7 ↓ 6 ↑ 5

Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 41.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 811 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/160/900 4 LS 30 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 BV8 |
| Fuel-supply p: | Power : kw( Bhp) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Delivery quantities — Setting values (mm³/H — Checking values (mm³/H

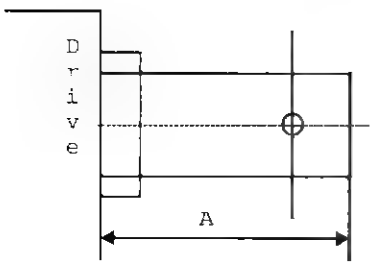
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 16.5 | 731 – 749 | 10 | 726 – 754 | 15 | |
| 2. | Basic setting | 900 | 16.5 | 705 – 735 | 16 | 697 – 743 | 24 | |
| 3. | Basic setting | 900 | 13.0 | 760 – 780 | 16 | 552 – 598 | 24 | |
| 4. | Basic setting | 300 | 5.0 | 50 - 80 | 15 | 43 - 87 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 ↑ 2 ↓ 3
8 [ ] 4
7 6 5

Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 41.5 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 013 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 12/10/160/900 LS 29 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 BV12 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: |

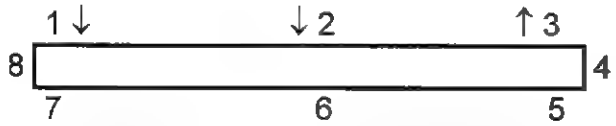
| | | |
|---|---|---|
| Perm pres.. 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 16.5 | 731 – 749 | 10 | 726 – 754 | 15 | |
| 2. | Basic setting | 900 | 16.5 | 705 – 735 | 16 | 697 – 743 | 24 | |
| 3. | Basic setting | 900 | 13.0 | 760 – 780 | 16 | 552 – 598 | 24 | |
| 4. | Basic setting | 300 | 5.0 | 50 - 80 | 15 | 43 - 87 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

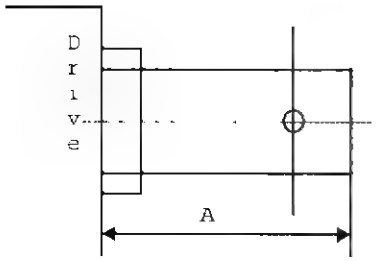
Drive




Fuel inlet 1 + 2
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 809 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/900 4 LS 26-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 V8 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: |

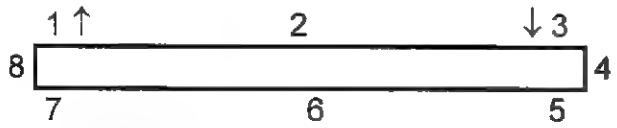
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = _____
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 493 – 507 | 8 | 489 – 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 – 539 | 15 | 502 – 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 – 658 | 20 | 613 – 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

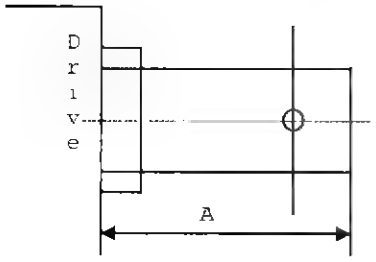
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 808 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/11 LS 21-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 603 V16 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

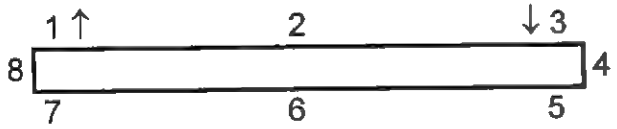
Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 6 - 5 - 7 - 8 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

Delivery quantities — Setting values (mm³/H — Checking values (mm³/H

| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 – 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

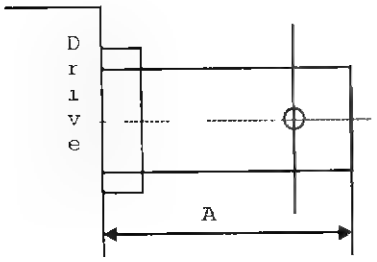
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 807 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/100 LS 20-1 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 603 V16 |
| Fuel-supply p: | Power : kw( Bh p) |
| Injector: | Applic.: |

Perm.pres.: 1.5 bar NHA: 0 681 443 022
Perm.pos: PS Open.p.: 172 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 2 x 1500
Overflow valve:
1 417 413 000

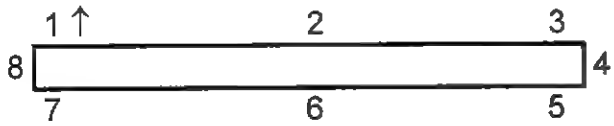
Test oil:
ISO 4113
40 +5° C

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 2 - 7 - 8 - 6 - 5
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 – 507 | 8 | 489 – 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 – 539 | 15 | 502 – 548 | 23 | |
| 3. | Basic setting | 900 | 15 | 622 – 658 | 20 | 613 – 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 – 79 | 15 | 44 – 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

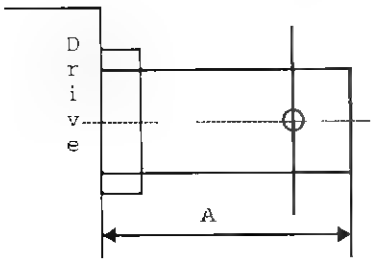
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 601 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/170/700/3 S2 | Customer: |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

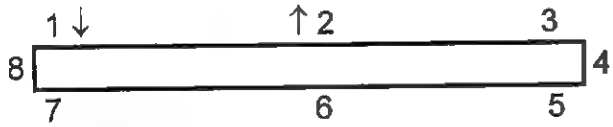
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 6,6 + 0,1 mm at CRT = 27 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18 | 622 – 638 | 12 | | | |
| 2. | Basic setting | 750 | 15 | 420 – 440 | 15 | | | |
| 3. | Basic setting | 300 | 12 | 203 – 227 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

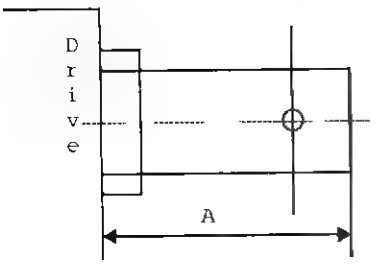
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 602 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/170/700/3 S3 | Customer: |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

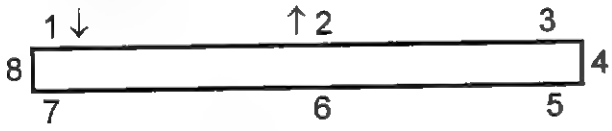
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 6.6 + 0.1 mm at CRT = 27 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18 | 622 – 638 | 12 | | | |
| 2. | Basic setting | 750 | 15 | 420 – 440 | 15 | | | |
| 3. | Basic setting | 300 | 12 | 203 – 227 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

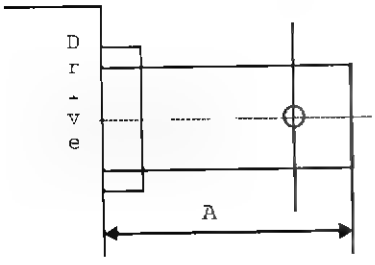
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 801 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/9M/170/900/6 S4 | Customer: SACM |
| Governor: | Engine: AGO195V16CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

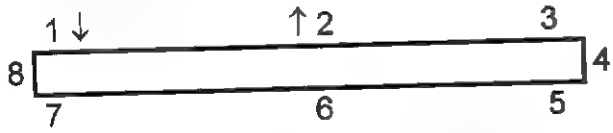
Test pump as per AP _____ LPC 2.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2 °CS
Cam spacing: 60 ± 0,5
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

Delivery quantities — Setting values (mm³/H — Checking values (mm³/H

| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 21 | 772 – 788 | 12 | | |
| 2. | Basic setting | 750 | 18 | 622 – 638 | 12 | | |
| 3. | Basic setting | 750 | 15 | 420 – 440 | 15 | | |
| 4. | Basic setting | 300 | 12 | 203 – 227 | 20 | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

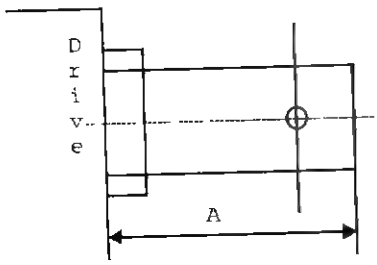
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.: |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/9M/170/500/6 S5 | Customer: SACM |
| Governor: | Engine: AGO195V16CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

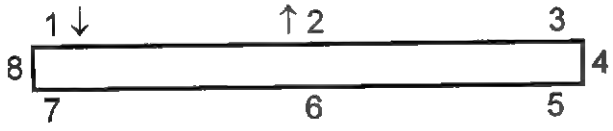
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2
Cam spacing: 60 ± 0,5 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 21 | 772 – 788 | 12 | | | |
| 2. | Basic setting | 750 | 18 | 622 – 638 | 12 | | | |
| 3. | Basic setting | 750 | 15 | 420 – 440 | 15 | | | |
| 4. | Basic setting | 300 | 12 | 203 – 227 | 20 | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

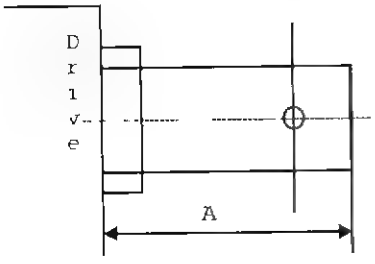
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 603 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/170/700/3 S 6 | Customer: |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

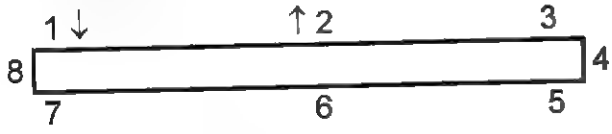
| | | |
|---|---|---|
| Perm.pres : 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 6.6 + 0.1 mm at CRT = 27 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18 | 622 – 638 | 12 | | |
| 2. | Basic setting | 750 | 15 | 420 – 440 | 15 | | |
| 3. | Basic setting | 300 | 12 | 203 – 227 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

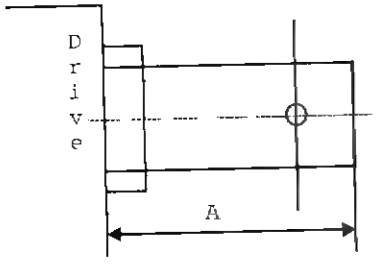
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 604 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/170/300/3 S 7 | Customer: |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

Perm.pres.: 1.5 bar _____ NHA: 0 681 443 022
Perm.pos: PS Open.p.: 172 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 2 x 1500
Overflow valve:
1 417 413 000

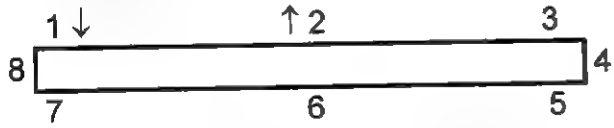
Test oil:
ISO 4113
40 +5° C

Test pump as per AP _____ LPC 6.6 +0.1 mm at CRT = 27 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18 | 622 – 638 | 12 | | |
| 2. | Basic setting | 750 | 15 | 520 – 440 | 15 | | |
| 3. | Basic setting | 300 | 12 | 203 – 227 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

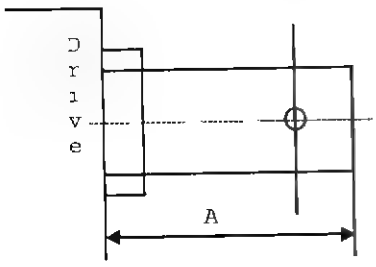
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 803 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/9M/170/900/6 S 8 | Customer: SACM |
| Governor: | Engine: AGO195V16CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

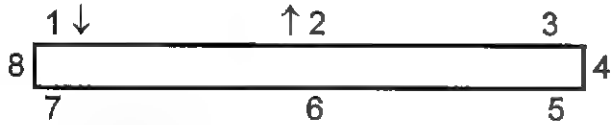
| | | |
|---|---|---|
| Perm pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 2.4 +0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
=
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2
Cam spacing: 60 ± 0.5 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 21 | 772 – 788 | 12 | | | |
| 2. | Basic setting | 750 | 18 | 622 – 638 | 12 | | | |
| 3. | Basic setting | 750 | 15 | 420 – 440 | 15 | | | |
| 4. | Basic setting | 300 | 12 | 203 – 227 | 20 | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive

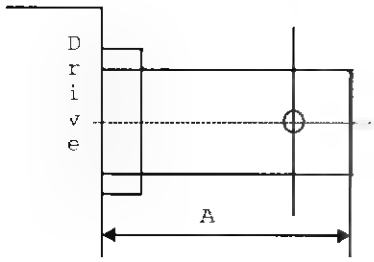



Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps :

Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 804 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/9M/170/500/6 S 9 | Customer: SACM |
| Governor: | Engine: AGO195V16CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

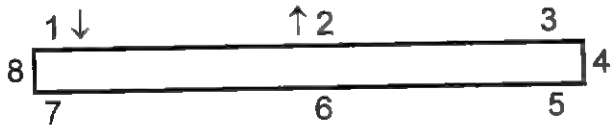
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP ____ LPC 2.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2
Cam spacing: 60 ± 0,5 °CS
FB mark : Cyl. no. ____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 21 | 772 – 788 | 12 | | | |
| 2. | Basic setting | 750 | 18 | 622 – 638 | 12 | | | |
| 3. | Basic setting | 750 | 15 | 420 – 440 | 15 | | | |
| 4. | Basic setting | 300 | 12 | 203 – 227 | 20 | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

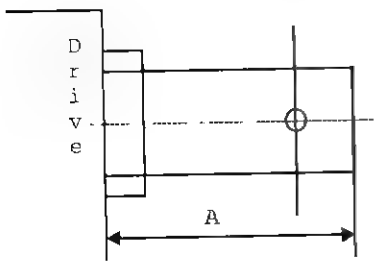
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 601 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 6/10/150/300 RS 10 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 604 L6 |
| Fuel-supply p: | | Power : | kw( Bhp ) |
| Injector: | | Applic.: | |

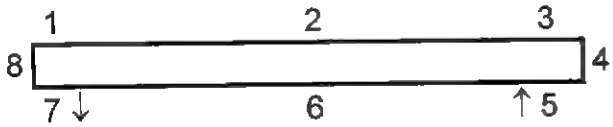
| | | |
|---|---|---|
| Perm.pres : 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13.5 | 493 – 507 | 8 | 489 – 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 – 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

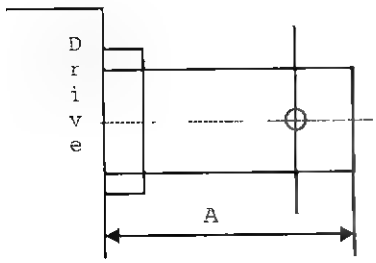
Drive




Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 602 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/300/3 LS 11 | Customer: |
| Governor: | Engine: TBD 603 L12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

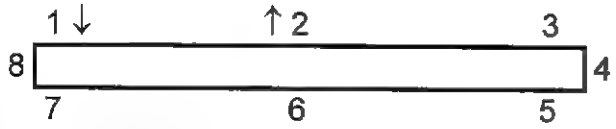
| | | |
|---|---|---|
| Perm.pres : 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 15 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 6 - 2 - 4 - 3 - 5
Cam spacing: 0 15 120 135 240 255 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13.5 | 493 - 507 | 8 | 409 – 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 – 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 46 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

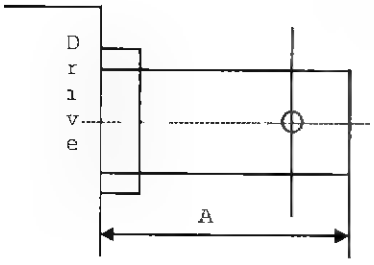
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 801 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/100 LS 12 | Customer: Südbremse |
| Governor: | Engine: MWM TBD 603V16 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

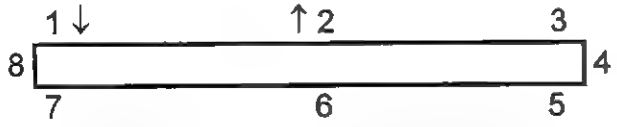
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 15 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 2 - 7 - 8 - 6 - 5
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13.5 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

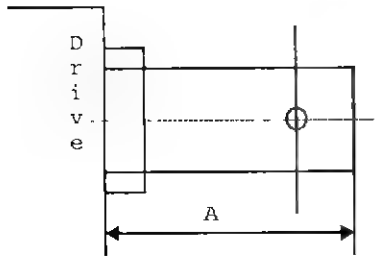
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 603 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/300/3 LS 13 | Customer: |
| Governor: | Engine: TBD 603 V 12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

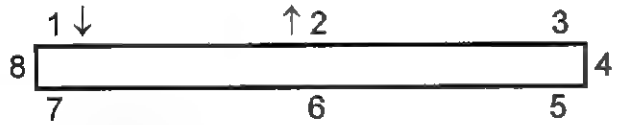
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 15 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 4 - 2 - 6
Cam spacing: 0 15 120 135 240 255 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13.5 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 46 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

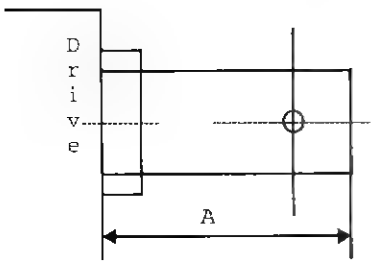
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 802 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 8/10/150/100 LS 14 | Customer: | Südbremse |
| Governor: | | Engine: | MWM TBD 603V16 |
| Fuel-supply p: | | Power : | kw( Bhp ) |
| Injector: | | Applic.: | |

| | | | | | |
|---|---|---|---|---|---|
| Perm.pres.: | 1.5 bar | NHA: | 0 681 443 022 | Press.l: | 1 680 750 027 |
| Perm.pos: | PS | Open.p.: | 172 + 3 bar | (mm) | 8 x 2 x 1500 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | | | Overflow valve:<br>1 417 413 000 | |

Test oil: ISO 4113

40 +5° C

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 15 mm

DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS

Cylinder 1 on drive side

Cam sequence: 1 - 3 - 6 - 5 - 7 - 8 - 4 - 2

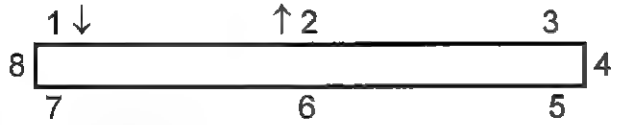
Cam spacing: 0 45 90 135 180 225 270 315 °CS

FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13.5 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

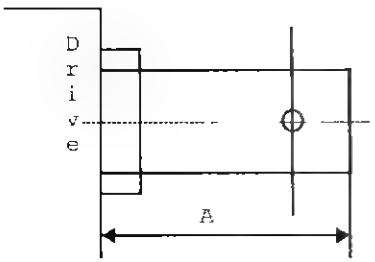
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 604 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/300 RS | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604 L6 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

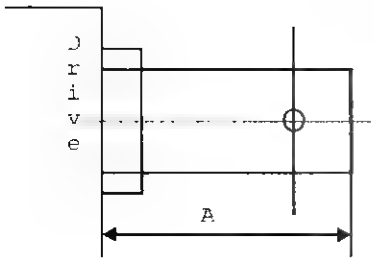
| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 2 3
8 [ ] 4
7 ↓ 6 ↑ 5

Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 010 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | FA-PE 12/10/150/900/6 LS 16 | Customer: | Südbremse |
| Governor: | | Engine: | MWM TBD 604V12 |
| Fuel-supply p: | | Power : | kw( Bhp ) |
| Injector: | | Applic.: | |

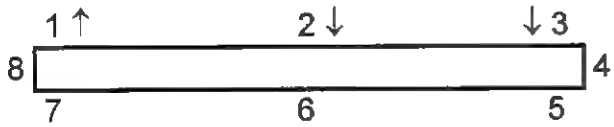
| | | | | | |
|---|---|---|---|---|---|
| Perm.pres.: 1.5 bar | | NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS | | Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | | | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT $_{max}$ °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

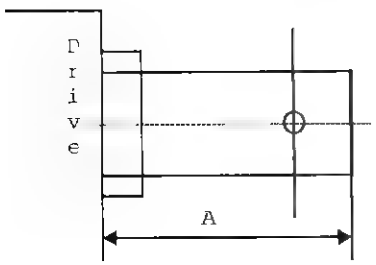
Drive




Fuel inlet 2 + 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 605 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/100 LS 17 | Customer: Südbremse |
| Governor: | Engine: MWM TBD 603V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

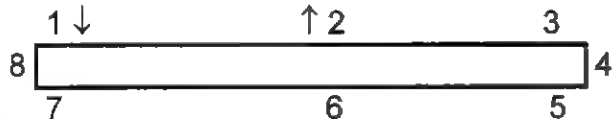
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = _____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 4 - 2 - 6
Cam spacing: _____ °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

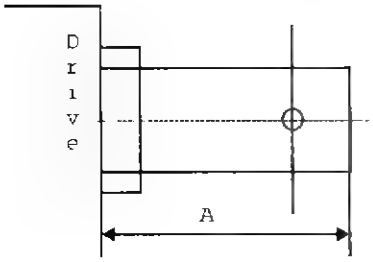
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 606 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/10/150/100 LS 18 | Customer: Südbremse |
| Governor: | Engine: MWM TBD 603V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

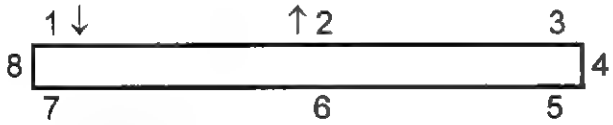
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
=
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 4 - 2 - 6
Cam spacing: °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

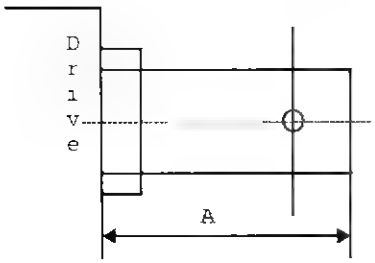
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 803 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/900/4 LS 19 | Customer: Südbremse |
| Governor: | Engine: MWM TBD 604 V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

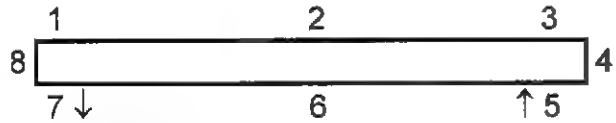
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT $_{max}$ °CS
=
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13.5 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13.5 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16.5 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5.5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

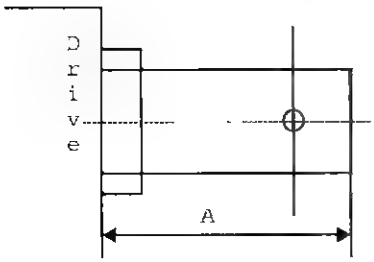
Drive




Fuel inlet 5
Fuel outlet 7

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 804 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/100 LS 20 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 603 V16 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

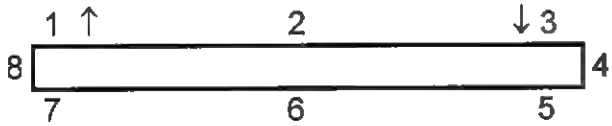
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 2 - 7 - 8 - 6 - 5
Cam spacing: 0 45 90 135 180 225 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

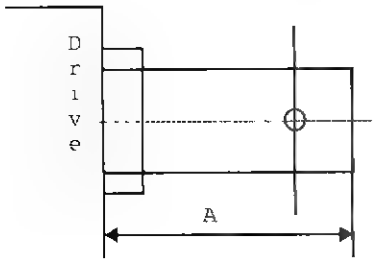
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 805 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/100 LS 21 | Customer: Deutz-MWM |
| Governor: | Engine: MWM TBD 603V16 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

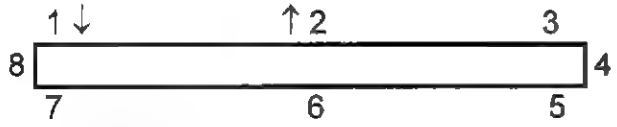
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
=
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 6 - 5 - 7 - 8 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Delivery quantities — Setting values (mm³/H — Checking values (mm³/H

| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

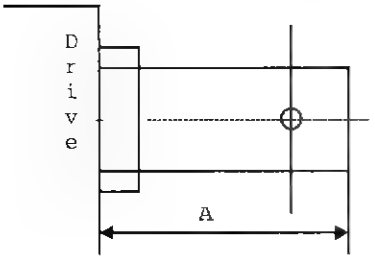
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 361 001 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 10/9M/180/100 S 2 | Customer: |
| Governor: | Engine: AGO 195-V20 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

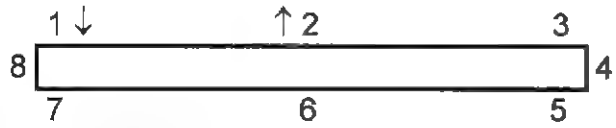
| | | |
|---|---|---|
| Perm.pres : 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT $_{max}$ °CS
=
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 6 - 9 - 7 - 10 - 8 - 5 - 2 - 4
Cam spacing: 0 36 72 108 144 180 216 252 288 324 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 23 | 1060 –1080 | 18 | | | |
| 2. | Basic setting | 750 | 15 | 568 – 592 | 22 | | | |
| 3. | Basic setting | 300 | 12 | 246 – 274 | 27 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

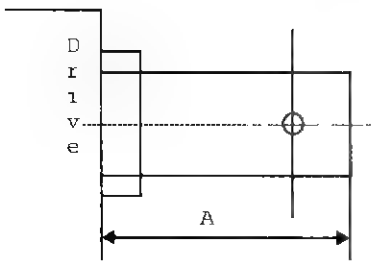
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 361 002 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 10/9M/180/100 S 23 | Customer: |
| Governor: | Engine: AGO 195-V20 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 4.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 6 - 9 - 7 - 10 - 8 - 5 - 2 - 4
Cam spacing: 0 36 72 108 144 180 216 252 288 324 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

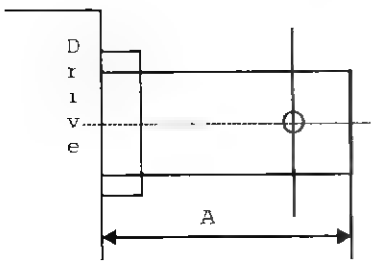
| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 23 | 1060 –1080 | 18 | | | |
| 2. | Basic setting | 750 | 15 | 568 – 592 | 22 | | | |
| 3. | Basic setting | 300 | 12 | 246 – 274 | 27 | | | |
| | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1 ↓ ↑ 2 3
8 4
7 6 5

Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 805 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/9M/180/100 S 24 | Customer: |
| Governor: | Engine: AGO 195 V 16 C |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

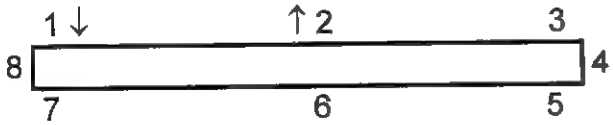
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 23 | 1060 –1808 | 18 | | | |
| 2. | Basic setting | 750 | 15 | 568 – 592 | 22 | | | |
| 3. | Basic setting | 300 | 12 | 246 – 274 | 27 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

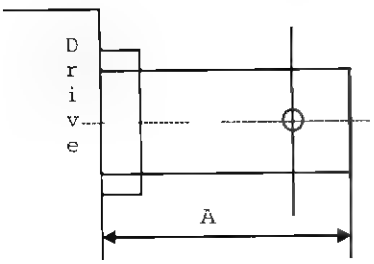
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 806 |
|---|---|---|

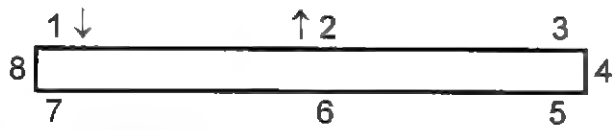
| | |
|---|---|
| Pump: FA-PE 8/9M/180/100/S 25 | Customer: |
| Governor: | Engine: AGO 195 V 16 C |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres. 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 7 - 8 - 6 - 5 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 - 507 | 8 | 489 - 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 - 539 | 15 | 502 - 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 - 658 | 20 | 613 - 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

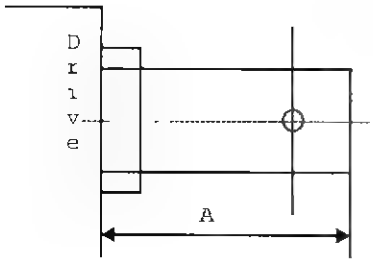
Drive




Fuel inlet 1
Fuel outlet 3

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 809 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/900/4 LS 26 | Customer: Südbremse |
| Governor: | Engine: MWM TBD 604 V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 172 + 3 bar | (mm) 8 x 2 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>1 417 413 000 | 40 +5° C |

Test pump as per AP _____ LPC 4.1 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 13 | 493 – 507 | 8 | 489 – 511 | 12 | |
| 2. | Basic setting | 900 | 13 | 511 – 539 | 15 | 502 – 548 | 23 | |
| 3. | Basic setting | 900 | 16 | 622 – 658 | 20 | 613 – 667 | 30 | |
| 4. | Basic setting | 300 | 5 | 51 - 79 | 15 | 44 - 86 | 23 | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

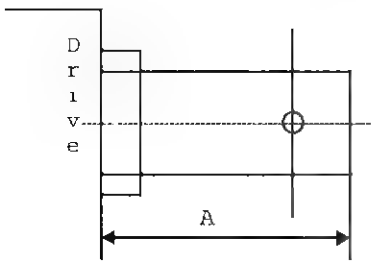
Drive 1 ↓ ↑ 2 3
8 4
7 6 5

Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps :

Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

Testoil-ISO 4113

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 605 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/180/700/3 S 27 | Customer: SACM |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

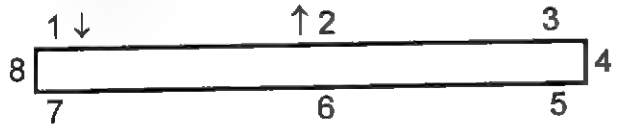
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 23 | 1060 –1080 | 18 | | | |
| 2. | Basic setting | 750 | 15 | 568 – 592 | 22 | | | |
| 3. | Basic setting | 300 | 12 | 264 – 274 | 27 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

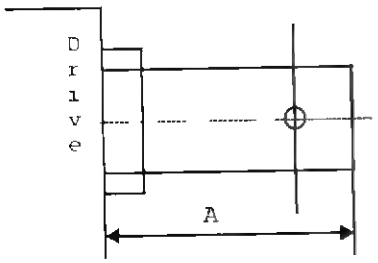
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 361 606 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 6/9M/180/300/3 S 28 | Customer: SACM |
| Governor: | Engine: AGO195V12CSMR |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

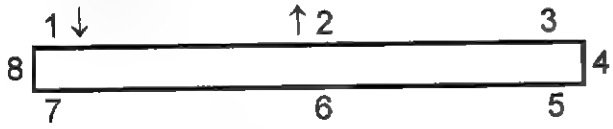
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 0 681 443 022<br>Perm.pos: PS Open.p.: 172 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 2 x 1500<br>Overflow valve:<br>1 417 413 000 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.4 + 0.1 mm at CRT = 26 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 3 - 6 - 2 - 4
Cam spacing: 0 60 120 180 240 300 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 23 | 1060 –1080 | 18 | | | |
| 2. | Basic setting | 750 | 15 | 568 – 592 | 22 | | | |
| 3. | Basic setting | 300 | 12 | 246 – 274 | 27 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

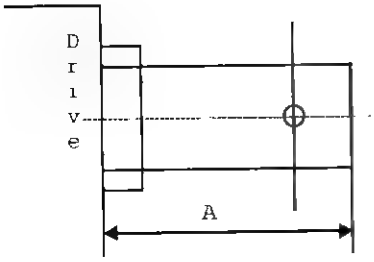
Drive




Fuel inlet 1
Fuel outlet 2

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : Projection of control rack on drive side when set to equal value
A = approx. 39 mm




- Enter measured value in test sheet
- Enter projection when switched off (CRT = 0)

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 400 365 818 |
|---|---|---|

| | |
|---|---|
| Pump: FA-PE 8/10/150/100 RS 42 | Customer: SACM |
| Governor: | Engine: V 8 X - 1500 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: |

| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 1 688 901 026<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: (mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 4.2 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 2 - 6 - 3 - 4 - 5 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 14.5 | 684 – 692 | 10 | | |
| 2. | Basic setting | 750 | 7.0 | 184 – 200 | 15 | | |
| 3. | Basic setting | 300 | 6.0 | 65 - 79 | 15 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

Drive 1 2 3
8 [ ] 4
7 ↓ 6 ↑ 5

Fuel inlet 5
Fuel outlet 7

Other test operations: RWO = 14.5 mm full-load lockup
RW = 0 = mechanical stop

Addit. work steps : Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).
The angular cam spacing is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward-delivery valve.

LPC at cyl. 1 stamped in housing.

Strobe flange: Settings see page 2.

Project drawing: A 406 080 020

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 822 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 44 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

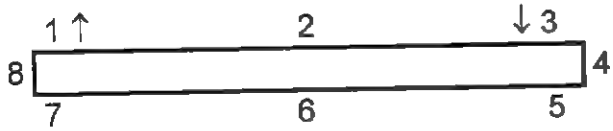
| | | |
|---|---|---|
| Perm pres : 1.5 bar ____ NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 3.0+0.1 mm at CRT = > 17 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 7 - 8 - 6 - 3 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

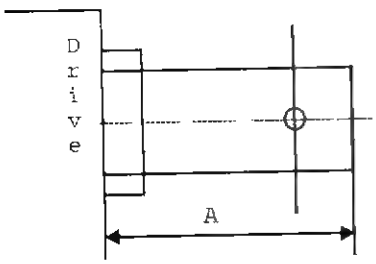
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar)




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 823 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 45 | Customer: Deutz-MWM |
| | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

Perm.pres.: 1.5 bar NHA: 1 688 901 029
Perm.pos: PS Open.p.: 220 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 4 x 1500
Overflow valve:
9 413 369 310

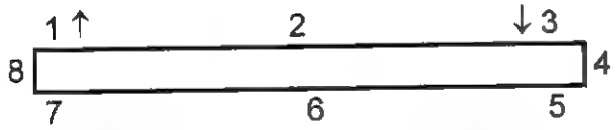
Test oil:
ISO 4113
40 +5° C

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = > 17 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 8 - 6 - 5 - 7 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

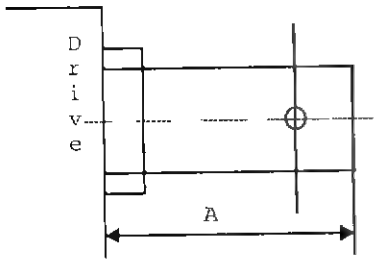
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dail gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 824 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : 112 kw( Bhp<br>0 ) |
| Injector: | Applic.: Lokom./Katamaran |

Perm.pres.: 1.5 bar ____ NHA: 1 688 901 029
Perm.pos: PS Open.p.: 220 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 4 x 1500
Overflow valve:
9 413 369 310

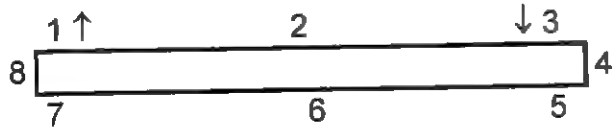
Test oil:
ISO 4113
40 +5° C

Test pump as per AP ____ LPC 3.0 + 0.1 mm at CRT = 20 mm
DOR clock wise looking at drive/SD diff. betw. CRT = ____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. ____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

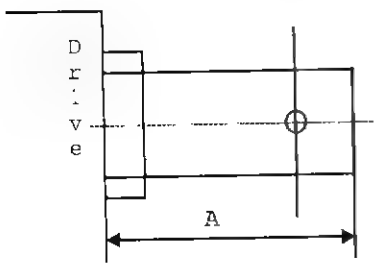
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 825 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 47 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

Perm.pres.: 1.5 bar NHA: 1 688 901 029
Perm.pos: PS Open.p.: 220 + 3 bar
When control rack on rear of pump:
P.S. 1 left, P.S. 2 right

Press.l: 1 680 750 027
(mm) 8 x 4 x 1500
Overflow valve:
9 413 369 310

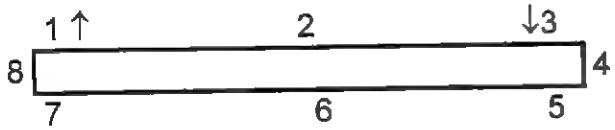
Test oil:
ISO 4113
40 +5° C

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 7 - 8 - 6 - 3 - 4 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

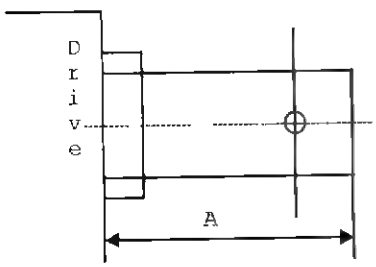
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0-3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 826 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 48 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

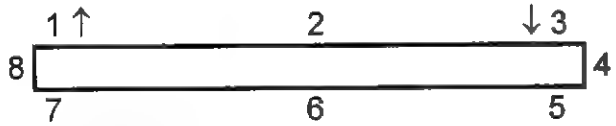
| | | |
|---|---|---|
| Perm.pres.. 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 3 - 4 - 8 - 6 - 5 - 7 - 2
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18:0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

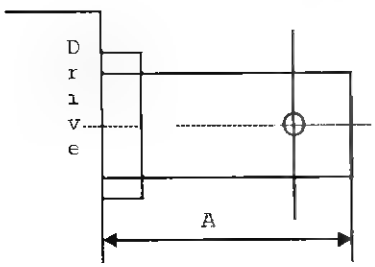
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 827 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 49 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 604B V8 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

| | | |
|---|---|---|
| Perm pres.: 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8
Cam spacing: 0 45 90 135 180 225 270 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

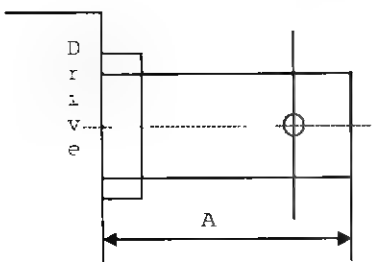
| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18:0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | Measure | | | | |
| 3. | Basic setting | 300 | 5:5 | Measure | | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

Drive 1↑ 2 ↓3
8 4
7 6 5

Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 828 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | PE 8/10/150/100 LS 50 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 620 V16 |
| Fuel-supply p: | | Power : | 224 kw( 0 Bhp ) |
| Injector: | | Applic.: | Lokom./Katamaran |

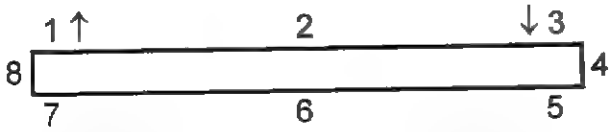
| | | |
|---|---|---|
| Perm pres : 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = > 17 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 8 - 7 - 4 - 5 - 2 - 6 - 3
Cam spacing: 0 67.5 180 205.5 225 247.5 292.5 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

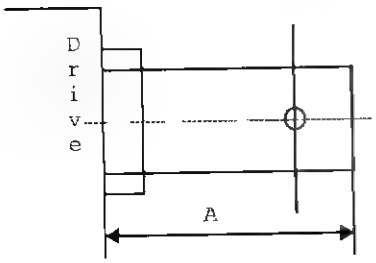
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 829 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 51 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 620 V16 |
| Fuel-supply p: | Power : 224 kw( 0 Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

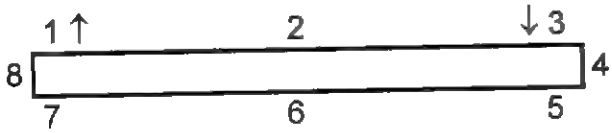
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = > 17 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT max = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 8 - 3 - 6 - 5 - 7 - 2 - 4
Cam spacing: 0 22.5 45 157.5 225 270 292.5 337.5 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

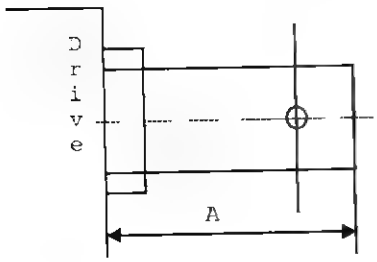
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 831 |
|---|---|---|

| | | | |
|---|---|---|---|
| Pump: | PE 8/10/150/100 LS 52 | Customer: | Deutz-MWM |
| Governor: | | Engine: | TBD 620 V16 |
| Fuel-supply p: | | Power : | 224 kw( 0 Bhp ) |
| Injector: | | Applic.: | Lokom./Katamaran |

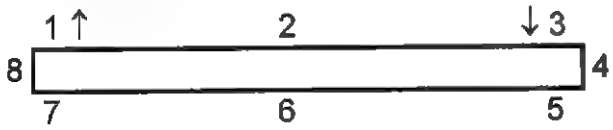
| | | | |
|---|---|---|---|
| Perm.pres.: 1.5 bar ____ NHA: 1 688 901 029 | Press.l: 1 680 750 027 | Test oil: |
| Perm.pos: PS Open.p.: 220 + 3 bar | (mm) 8 x 4 x 1500 | ISO 4113 |
| When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Overflow valve:<br>9 413 369 310 | 40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = ____
Cylinder 1 on drive side
Cam sequence: 1 - 8 - 7 - 4 - 5 - 2 - 6 - 3
Cam spacing: 0 67.5 18 205.5 225 247.5 292.5 315 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 - 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

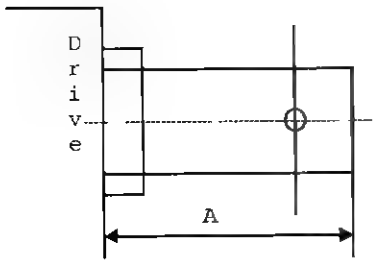
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410365 832 |
|---|---|---|

| | |
|---|---|
| Pump: PE 8/10/150/100 LS 53 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 620 V16 |
| Fuel-supply p: | Power : 224 kw( 0 Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

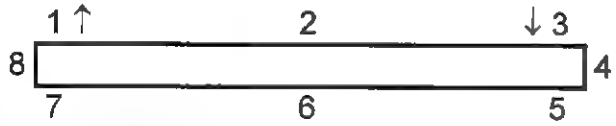
| | | |
|---|---|---|
| Perm.pres : 1.5 bar ____ NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = _____ +0.5 mm u.CRT $_{max}$ = ____ °CS
Cylinder 1 on drive side
Cam sequence: 1 - 8 - 3 - 6 - 5 - 7 - 2 - 4
Cam spacing: 0 22.5 45 157.5 225 270 292.5 337.5 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead | |
|---|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

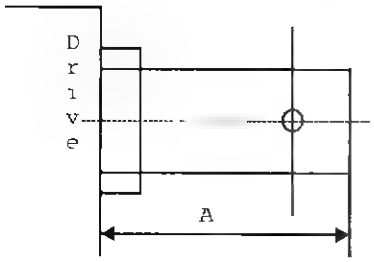
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 018 |
|---|---|---|

| | |
|---|---|
| Pump: PE 12/10/150/100 LS 54 | Customer: Deutz-MWM |
| Governor: | Engine: TBD 620 V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokmo./Katamaran |

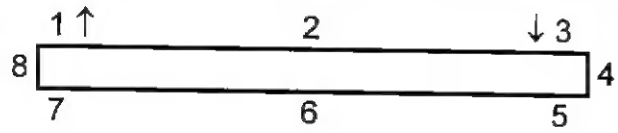
| | | |
|---|---|---|
| Perm pres. 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br><br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = > 17 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max °CS
_____ = _____
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.5 °CS

Testoil-ISO 4113

| Delivery quantities | | | | Setting values (mm³/H | | Checking values (mm³/H | | |
|---|---|---|---|---|---|---|---|---|
| | | n rpm | CRT mm | Mean value | Spread | Mean value | Spead | |
| 1. | Basic setting | 750 | 18:0 | 1010 –1028 | 28 | | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | | |
| 4. | Basic setting | | | | | | | |
| 5. | Del.qty. profile | | | | | | | |
| 6. | Del.qty. profile | | | | | | | |

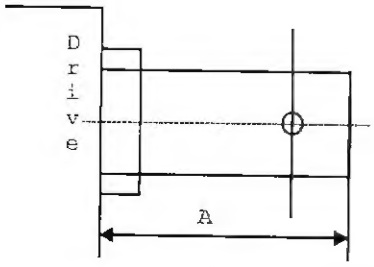
Drive




Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps : LPC setting.
Set cyl. 1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

| BOSCH | IN-LINE INJECTION PUMPS<br>Testing and setting values | Assembly no.:<br>9 410 365 019 |
|---|---|---|

| | |
|---|---|
| Pump: PE 12/10/150/100 LS 55 | Customer: DeUTZ-MWM |
| Governor: | Engine: TBD 620 V12 |
| Fuel-supply p: | Power : kw( Bhp ) |
| Injector: | Applic.: Lokom./Katamaran |

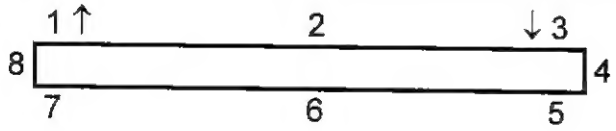
| | | |
|---|---|---|
| Perm.pres.: 1.5 bar NHA: 1 688 901 029<br>Perm.pos: PS Open.p.: 220 + 3 bar<br>When control rack on rear of pump:<br>P.S. 1 left, P.S. 2 right | Press.l: 1 680 750 027<br>(mm) 8 x 4 x 1500<br>Overflow valve:<br>9 413 369 310 | Test oil:<br>ISO 4113<br>40 +5° C |

Test pump as per AP _____ LPC 3.0 + 0.1 mm at CRT = 12 mm
DOR clock wise looking at drive/SD diff. betw. CRT = +0.5 mm u.CRT max = °CS
Cylinder 1 on drive side
Cam sequence: 1 - 12 - 8 - 5 - 3 - 10 - 9 - 4 - 2 - 11 - 7 - 6
Cam spacing: 0 45 60 105 120 165 180 225 240 285 300 345 °CS
FB mark : Cyl. no. _____ Tol.f.cam spacing:± 0.15 °CS

Testoil-ISO 4113

| Delivery quantities | | n rpm | CRT mm | Setting values (mm³/H Mean value | Spread | Checking values (mm³/H Mean value | Spead |
|---|---|---|---|---|---|---|---|
| 1. | Basic setting | 750 | 18.0 | 1010 –1028 | 28 | | |
| 2. | Basic setting | 750 | 7.0 | 230 – 250 | 28 | | |
| 3. | Basic setting | 300 | 5.5 | 70 - 80 | 20 | | |
| 4. | Basic setting | | | | | | |
| 5. | Del.qty. profile | | | | | | |
| 6. | Del.qty. profile | | | | | | |

Drive

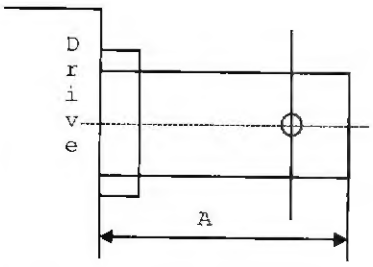



Fuel inlet 3
Fuel outlet 1

Other test operations: CRT0 = defined by marking the control rack with a locating pin

Addit. work steps :

LPC setting.
Set cyl.1 to LPC with dial gauge (inlet pressure ≈ 0.3 bar).




The angular cam is set with inlet pressure ≈ 0.3 bar and delivery valve screwed in, without forward – delivery valve.

# Inhaltsverzeichnis

| Einspritzpumpe | Position | Komb.Nr. |
|---|---|---|
| FA-PE 6/9M/170/300/3 S 7 | B6 | 9 400 361 604 |
| FA-PE 6/9M/170/700/3 S 2 | B1 | 9 400 361 601 |
| FA-PE 6/9M/170/700/3 S 3 | B2 | 9 400 361 602 |
| FA-PE 6/9M/170/700/3 S 6 | B5 | 9 400 361 603 |
| FA-PE 6/9M/180/300/3 S 28 | C3 | 9 400 361 606 |
| FA-PE 6/9M/180/700/3/S 27 | C2 | 9 400 361 605 |
| FA-PE 6/10/150/300/3 LS 11 | B10 | 9 400 365 602 |
| FA-PE 6/10/150/300/3 LS 13 | B12 | 9 400 365 603 |
| FA-PE 6/10/150/100 LS 17 | B16 | 9 410 365 605 |
| FA-PE 6/10/150/100 LS 17-1 | A3 | 9 400 365 608 |
| FA-PE 6/10/150/100 LS 18 | B17 | 9 410 365 606 |
| FA-PE 6/10/150/100 LS 18-1 | A4 | 9 400 365 609 |
| FA-PE 6/10/150/300 RS 10 | B9 | 9 400 365 601 |
| FA-PE 6/10/150/300 RS 15 | B14 | 9 400 365 604 |
| FA-PE 6/10/150/300 RS 15-1 | A1 | 9 400 365 607 |
| FA-PE 6/10/160/300 RS 31 | A17 | 9 400 365 811 |
| FA-PE 6/10/160/300 RS 34 | A14 | 9 400 365 612 |
| FA-PE 6/10/160/300 RS 38 | A6 | 9 400 365 613 |
| FA-PE 8/9M/180/100/S 24 | B23 | 9 400 361 805 |
| FA-PE 8/9M/180/100/S 25 | B24 | 9 400 361 806 |
| FA-PE 8/9M/170/900/6 S 4 | B3 | 9 400 361 801 |
| FA-PE 8/9M/170/500/6 S 5 | BA | |
| FA-PE 8/9M/170/500/6 S 9 | B8 | 9 400 361 804 |
| FA-PE 8/9M/170/900/6 S 8 | B7 | 9 400 361 803 |
| FA-PE 8/10/150/100 LS 12 | B11 | 9 410 365 801 |
| FA-PE 8/10/150/100/LS 14 | B13 | 9 410 365 802 |
| FA-PE 8/10/150/100 LS 20 | B18 | 9 400 365 804 |
| FA-PE 8/10/150/100 LS 20-1 | A22 | 9 400 365 807 |
| FA-PE 8 /10/150/100 LS 20-1 | A21 | 9 400 365 808 |
| FA-PE 8/10/150/100 LS 21 | B20 | 9 410 365 805 |
| FA-PE 8/10/150/100 LS 36 | A12 | 9 400 365 814 |
| FA-PE 8/10/160/900 LS 39 | A5 | 9 400 365 815 |
| FA-PE 8/10/150/900/4 LS 19 | B18 | 9 410 365 803 |
| FA-PE 8/10/150/900 4 LS 26 | C1 | 9 410 365 809 |
| FA-PE 8/10/150/900 4 LS 26-1 | A20 | 9 410 365 809 |
| FA-PE 8/10/160/900 4 LS 30 | A18 | 9 400 365 811 |
| FA-PE 8/10/160/900/4 LS 33 | A15 | 9 400 365 812 |
| FA-PE 8/10/160/100 LS 35 | A13 | 9 400 365 813 |
| FA-PE 8/10/160/100 LS 40 | A10 | 9 400 365 816 |
| FA-PE 8/10/160/100 LS 41 | A9 | 9 400 365 817 |
| FA-PE 8/10/150/100 RS 42 | C4 | 9 400 365 818 |
| FA-PE 10/9M/180/100/S 22 | B21 | 9 410 361 001 |
| FA-PE 10/9M/180/100/S 23 | B22 | 9 410 361 002 |
| FA-PE 12/10/150/900 LS 16-1 | A2 | 9 410 365 012 |
| FA-PE 12/10/150/900/6 LS 16 | B15 | 9 410 365 010 |
| FA-PE 12/10/160/100 LS 37 | A11 | 9 400 365 015 |
| FA-PE 12/10/160/100 LS 43 | A7 | 9 400 365 017 |
| FA-PE 12/10/160/900 LS 29 | A19 | 9 400 365 013 |
| FA-PE 12/10/160/300 LS 32 | A16 | 9 400 365 014 |
| FA-PE 12/10/160/900 LS 42 | A8 | 9 400 365 016 |
| PE 8/10/150/100 LS 43 | C10 | 9 410 365 827 |
| PE 8/10/150/100 LS 44 | C5 | 9 410 365 822 |
| PE 8/10/150/100 LS 45 | C6 | 9 410 365 823 |
| PE 8/10/150/100 LS 46 | C7 | 9 410 365 824 |
| PE 8/10/150/100 LS 47 | C8 | 9 410 365 825 |

| | | |
|---|---|---|
| PE 8/10/150/100 LS 48 | C9 | 9 410 365 826 |
| PE 8/10/150/100 LS 50 | C11 | 9 410 365 828 |
| PE 8/10/150/100 LS 51 | C12 | 9 410 365 829 |
| PE 8/10/150/100 LS 52 | C13 | 9 410 365 831 |
| PE 8/10/150/100 LS 53 | C14 | 9 410 365 832 |
| PE 12/10/150/100 LS 54 | C15 | 9 410 365 018 |
| PE 12/10/150/100 LS 55 | C16 | 9 410 365 019 |